OIRE JAPPE

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Group Art Unit 1617

\$ 1617

In re Patent Application of

Charles W. Bishop, et al.

Application No. 09/753,697

Confirmation No.: 1609

Filed: January 3, 2001

Examiner: Theodore J. Criares

"24-HYDROXYVITAMIN D, ANALOGS

AND USES THEREOF"

I, Sally J. Sorensen, hereby certify that this correspondence is being deposited with the US Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date of my signature.

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March 11. 2004

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# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 CFR §1.97(c)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The Examiner's attention is directed to the references which are listed on the attached Forms PTO/SB/08A and PTO/SB/08B, copies of which are attached. This Statement is also being accompanied by a check for \$180 in payment of the fee required under 37 CFR §1.17(p). Please charge or credit Deposit Account No. 50-0842 with any shortage or overpayment of the required fee. This paper submission is being filed simultaneously with an electronic IDS submission and both are considered to be part of the same, single IDS. Citation of these references is respectfully requested.

No concession is made that these documents are prior art, and Applicant expressly reserves the right to antedate the documents as may be appropriate.

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Respectfully submitted

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Substitute for form 1449B/PTO		Complete if Known
	Application Number	09/753,697
INFORMATION DISCLOSURE	Filing Date	January 3, 2001
STATEMENT BY APPLICANT	First Named Inventor	Charles W. Bishop
	Group Art Unit	1617
OIP (use as many sheets as necessary)	Examiner Name	Theodore J. Criares
Sheet of 5	Attorney Docket Number	017620-9316

MAR 1 5 2004

#### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.

AA	Barton, D. et al., "Synthetic Uses of Steroidal Ring & Diene Protection: 22,23-Dihydroergosterol," <i>JCS Perkin I</i> , (1976) pp. 821-826.	
 A D	Beer, T. et al., "Weekly High-Dose Calcitriol and Docetaxel in Metastatic Androgen-Independent	-
AB	Prostate Cancer," Journal of Clinical Oncology, (Jan. 2003) 21:1:123-128.	
AC	Blazsek, I. et al. "Combined Differentiation Therapy in Myelodysplastic Syndrome with Retinoid Acid,	
	1α,25 Dihydroxyvitamin D <sub>3</sub> , and Prednisone," 16:4:259-264 (Abstract).	
AD	Brautbar, N. "Osteoporosis: Is 1,25-(OH)2D3 of Value in Treatment?" Nephron (1986) 44:161-166.	
AE	Braunwald, E. et al., Harrison's Principles of Internal Medicine: Part Eleven, "Disorders of Bone and	
	Mineral Metabolism," Chapter 335, McGraw-Hill, New York, (1987) pp. 1860-1865.	-
AF	Brown, J.P. et al., "Serum Bone Gala-Protein: A Specific Marker for Bone Formation in	
 	Postmenopausal Osteoporosis," Lancet, (1984) 1:1091-1093.	
AG	Caniggia, A. et al., "Effect of a Long-Term Treatment with 1,25-Dihydroxyvitamin D <sub>3</sub> on Osteocalcin in Postmenopausal Osteoporosis," <i>Cacified Tissue Int.</i> , (1986) 38:328-332.	i
AH	Christiansen, C. et al., "Prevention of Early Postmenopausal Bone Loss: Controlled 2-Year Study in 315	
	Normal Females," Europ J Clin Inves., (1980) 10:273-279.	
ΑI	Crump, D.R. et al., "(22S)-Hydroxyvitamin D <sub>4</sub> ," J.C.S. Perkins Trans. I, (1973) pp. 2731-2733.	
AJ	Cho, Y.L. et al., "Combined Effects of 1,25-Dihydroxyvitamin D <sub>3</sub> and Platinum Drugs on the Growth of MCF-7 Cells," <i>Cancer Research</i> , (June 1991) 51:2848-2853.	
AK	Defacque, H. et al., "Different Combinations of Retinoids and Vitamin D <sub>3</sub> Analogs Efficiently Promote Growth Inhibition and Differentiation of Myelomonocytic Leukemia Cell Lines," <i>J. Pharmacology and Experimental Therapeutics</i> , (1994) 271:193-199.	
AL	DeLuca et al., "Synthesis, Biological Activity, and Metabolism of 22,23-3H-Vitamin D <sub>4</sub> ," <i>Arch. Biochem, Biophys.</i> , (1968) 124:122-128.	
AM	Duda et al., "1,25-Dihydroxyvitamin D Stimulation Test for Osteoblast Function in Normal and Osteoporotic Postmenopausal Women," <i>J. Clinic Inves.</i> , (1987) 79:1249-1253.	
AN	Endo, K. et al., "Effect of Combination Treatment with Vitamin D Analog (OCT) and a Bisphosphonate (AHPrBP) in a Nude Mouse Model of Cancer-Associated Hypercalcemia," <i>Journal of Bone and Mineral Research</i> , (1998) 13:9:1378-1383.	
AO	Foldes, J. et al., "Long Term Treatment with 1α (OH)D <sub>3</sub> for Postmenopausal Osteoporosis: Efficacy and Safety," Osteoporosis, (1987) 2:971-973.	

Examiner	Date
Signature	Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Substitute for form 1449B/PTO					Complete if Known	
Substitute for form 1449B/1 TO				Application Number	09/753,697	
INFORMATION DISCLOSURE			OSURE	Filing Date	January 3, 2001	
STATE	STATEMENT BY APPLICANT			First Named Inventor	Charles W. Bishop	
				Group Art Unit	1617	
(use as many sheets as necessary)			)	Examiner Name	Theodore J. Criares	
Sheet 2 of 5			5	Attorney Docket Number	017620-9316	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS
Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
	AP	Gallagher, J.C. et al., "Effects of Increasing Doses of 1α-Hydroxyvitamin D <sub>2</sub> on Calcium Homeostasis in Postmenopausal Osteopenic Women," J. Bone Min. Res., (1994) 9:5:607-614.
	AQ	Grab, W. Z. Physiol. Chem., (1936) 243:63-89.
	AR	Guidelines for the Clinical Evaluation of Drugs Used in the Treatment of Osteoporosis, HEW (FDA) 80-3094, (1979) pp. 5-6.
	AS	Hershberger, P. et al. "Calcitriol (1,25-Dihydroxycholecalciferol) Enhances Paclitaxel Antitumor Activity in Vitro and in Vivo and Accelerates Paclitaxel-induced Apoptosis," Clinical Cancer Research, (April 2001) 7:1043-1051.
	AT	Hoikka, V. et al., "Treatment of Osteoporosis with 1-Alpha-Hydroxycholecalciferol and Calcium," <i>Acta. Med. Scand.</i> (1980) 207:221-224.
	AU	Holick, M.F., "Noncalcemic Actions of 1,25-Dihydroxyvitamin D <sub>3</sub> and Clinical Applications", <i>Bone</i> , (1995) 17:2:107S-110S.
	AV	Horst et al., "Quantitation of Vitamin D and its Metabolites and Their Plasma Concentrations in Five Species of Animals," <i>Anal. Biochem.</i> , (1981) 116:189-203.
	AW	Horst et al., "Discrimination in the Metabolism of Orally Dosed Ergocalciferol and Cholecalciferol by the Pig, Rat and Chick," <i>Biochem. J.</i> , (1982) 204:185-189.
	AX	Johnson, C. et al., "Vitamin D-related Therapies in Prostate Cancer," Cancer and Metastasis Review 21, (2002) pp. 147-158.
	AY	Kanis, J.A. et al., "Guidelines for Clinical Trials in Osteoporosis, A Position Paper of the European Foundation for Osteoporosis," <i>Osteoporosis Int.</i> , (1991) 1:182-188.
	AZ	Kim, S. et al., "Potentiation of 1,25-Dihydroxyvitamin D <sub>3</sub> -Induced Differentiation of Human Promyelocytic Leukemia Cells into Monocytes by Costunolide, a Germacranolide Sesquiterpene Lactone, <i>Biochem. Pharmacology</i> , (2002) 64:1233-1242.
	BA	Knutson, et al., "Metabolism of 1 α-Hydroxyvitamin D <sub>2</sub> to activated Dihydroxyvitamin D <sub>2</sub> Metabolites Decreases Endogenous 1α,25-Dihydroxyvitamin D <sub>3</sub> in Rats and Monkeys," <i>Endocrinology</i> , (1995) 136:11:4749-4753.
	BB	Kocienski, P.J. et al., "Calciferol and its Relatives. A Synthesis of Vitamin D <sub>4</sub> ," <i>J.C.S. Perkins I</i> , (1979) pp. 1290-1293.
	BC	Londowski, J.M. et al., "Biological Activity of the C-1, C-3, C-25, $\beta$ -D-Glucopyranosides of 1,25-Dihydroxyvitamin D <sub>3</sub> ," J. Pharmacology Expr. Ther., (1986) 237:3:837-840.

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INFORMATION DISCLOSURE			OSURE	Filing Date	January 3, 2001	
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(use as many sheets as necessary)			)	Examiner Name	Theodore J. Criares	
Sheet	Sheet 3 of 5			Attorney Docket Number	017620-9316	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS
Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
	BD	Majewski, et al., "Inhibition of Tumor Cell-Induced Angiogenisis by Retinoids, 1,25-Dihydroxyvitamin D <sub>3</sub> and their Combination," Cancer Letters, (1993) 75:35-39.
	BE	Martin and DeLuca, "Calcium Transport," Am. J. Physiol., 216:1352-1359.
	BF	Mathias, C.J. et al., "Tumor-Selective Radiopharmaceutical Targeting Via Receptor-Mediated Endocytosis of Gallium-67-Deferoxamine-Folate," <i>J. Nucl. Med.</i> (1996), 37(6):1003-1008.
	BG	McDonald, F.G., "The Multiple Nature of Vitamin D," J. Biol. Chem. 114, (1936) 1xv.
	ВН	Merck Index, S. Budavari (ed.), 11th ed., Merck & Co., Rahway, N.J. (1989) pp. 1579, #9930
	BI	Moffatt, K. et al., "1α,25-Dihydroxyvitamin D <sub>3</sub> and Platinum Drugs Act Synergistically to Inhibit the Growth of Prostate Cancer Cell Lines," <i>Clinical Cancer Research</i> , (March 1999) 5:695-703.
	BJ	Muindi, J. et al., "Pharmacokinetics of High-Dose Oral Calcitriol: Results From a Phase 1 Trial of Calcitriol and Paclitaxel," <i>Clinical Pharmacology &amp; Therapeutics</i> , (Dec. 2002) pp. 648-659.
	BK	Nemeto, H. et al., "A Stereoselective Synthesis of 1 $\alpha$ - Hydroxy-Vitamin D <sub>3</sub> ," CHEMISTRY LETTERS, (1985) 8:1131-1132.
	BL	Paaren et al., "Direct C(1) Hydroxylation of Vitamin D <sub>3</sub> and Related Compounds," J. Org. Chem., (1980) 45:3253.
	BM	Packman, K. et al. "Combination Treatment of MCF-7 Xenografts with the Vitamin D <sub>3</sub> Analog EB1089 and Antiestrogens," (Vitamin D Endocrine Workshop, Nashville, TN May 27-June 1, 2000) pp. 511-514.
	BN	Podenphant, J. et al., "Serum Bone Gla Protein and Other Biochemical Estimates of Bone Turnover in Early Postmenopausal Women During Prophylactic Treatment for Osteoporosis," <i>Acta Med Scand</i> , (1985) 218:329-333.
	ВО	Physician's Desk Reference, Edition 43:1746-1748.
	BP	Pouilles, J.M. et al., "Prevention of Early Postmenopausal Bone Loss with 1α-Hydroxy Vitamin D <sub>3</sub> , A Three-Year Prospective Study," <i>Clin Rheumatol</i> . 11, 4 (1992) pp. 492-497.
	BQ	Ravid, A. et al., "1,25-Dihydroxyvitamin D <sub>3</sub> Enhances the Susceptibility of Brease Cancer Cells to Doxorubicin-induced Oxidative Damage," <i>Cancer Research</i> , (February 15, 1999) 59:862-867.
	BR	Reeve, L.E. et al., "Biological Activity of $1\alpha$ -hydroxy Vitamin D <sub>2</sub> in the Rat," <i>Arch. Biochem. Biophys.</i> (Feb. 1978) 186:1:164-167.
	BS	Sato, F. et al., "Biological Activity of 1α,25-Dihydroxyvitamin D Derivatives – 24-epi-1α,25-Dihydroxyvitamin D-2 and 1α,25-Dihydroxyvitamin D-7," Biochim. <i>Biophys. Acta</i> , (1991) 1091:188-192.
		Data

Examiner Date Considered Signature

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Substitute for form 1449B/PTO			Complete if Known			
Substitute for form 1447 bit 10				Application Number	09/753,697	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			OSURE	Filing Date	January 3, 2001	
			ICANT	First Named Inventor	Charles W. Bishop	
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	BT	Siwinska, A. et al. "Potentiation of the Antiproliferative Effect <i>in Vitro</i> of Doxorubicin, Cisplatin and Genistein by New Analogues of Vitamin D," <i>Anticancer Research</i> , (2001) 21:1925-1929.
	BU	Sjoden et al., "Effects of 1 OHD <sub>2</sub> on Bone Tissue," <i>Acta. Endocrinol.</i> (Copenh.) (Aug. 1984) 16:4:564-568.
	BV	Skowronski et al., "Vitamin D and Prostate Cancer: 1,25 Dihydroxyvitamin D <sub>3</sub> Receptors and Actions in Human Prostate Cancer Cell Lines," <i>Endocrinology</i> , (1993) 132:1952-1960.
	BW	Slapak, C. et al., "Treatment of Acute Myeloid Leukemia in the Elderly with Low-Dose Cytarabine, Hydroxyurea, and Calcitriol," <i>Amer. J. Hematology</i> , (1992) 41:178-183.
	BX	Sommerfeldt et al., "Metabolism of Orally Administered [ <sup>3</sup> H]Ergocalciferol and [ <sup>3</sup> H]Cholecalciferol by Dairy Calves," <i>J. Nutr.</i> , (1983) 11:2595-2600.
	BY	Song, X.D. et al., "Bryostatin-1 and 1α,25-Dihydroxyvitamin D <sub>3</sub> Synergistically Stimulate the Differentiation of NB4 Acute Promyelocytic Leukemia Cells," <i>Leukemia</i> , (1999) 13:275-281.
	BZ	Studzinski, G. et al., "Potentiation by 1-α,25- Dihydroxyvitamin D <sub>3</sub> of Cytotoxicity to HL-60 Cells Produced by Cytarabine and Hydroxyurea," J. National Cancer Inst., (April 1986) 76:4:641-648.
	CA	Strugnell et al., "Metabolism of a Cyclopropane-Ring-Containing Analog of 1α-Hydroxyvitamin D <sub>3</sub> in a Hepatocyte Cell Model," <i>Biochem. Pharm.</i> , (1990) 40:333-341.
	СВ	Suzuki, Y. et al., "The Enhancement of the Chemotherapeutic Effects on Human Prostate Cancer Cell – The Combination with the Growth Factor Interaction Inhibitor (Suramin)," Acta Urologica (1993) 12:1215-1220, (Abstract).
	CC	Swami, S. et al. "1α,25-Dihydroxyvitamin D <sub>3</sub> Down-Regulates Estrogen Receptor Abundance and Suppresses Estrogen Actions in MCF-7 Human Breast Cancer Cells," <i>Clinical Cancer Research</i> , (Aug. 2000) 6:3371-3379.
	CD	Tachibana, Y. (Nisshin Flour Milling Co.), "Preparation of 1Beta-Hydroxyvitamin D <sub>2</sub> and D <sub>3</sub> ," <i>CHEMICAL ABSTRACTS</i> , (1990) 113:1:6688 Col. 2 Abstract No. 6683y.
	CE	Tanaka, Y. et al., Endocrinology (1973) 92:417-422.
	CF	Torres, R. et al., "Etoposide Stimulates 1,25-Dihydroxyvitamin D <sub>3</sub> Differentiation Activity, Hormone Binding and Hormone Receptor Expression in HL-60 Human Promyelocytic Cells, <i>Molecular and Cellular Biochemistry</i> , (2000) 208:157-162.
	CG	Tsuji, M. et al., "Synthesis of 22,23-Dihydro-1α,25-Dihydroxyvitamin D <sub>2</sub> and its 24R-Epimer, New Vitamin D <sub>2</sub> Derivatives," <i>Bull. Chem. Soc. Jpn.</i> , (1990) 63:8:2233-2238.

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Signature		Considered	

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Substitute for form 1447B/1 TO				Application Number	09/753,697	
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(use as many sheets as necessary)			)	Examiner Name	Theodore J. Criares	
Sheet	5	of	5	Attorney Docket Number	017620-9316	

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	СН	Wang, Q. et al., "1,25-Dihydroxyvitamin D <sub>3</sub> and All-trans-Retinoic Acid Sensitize Breast Cancer Cells to Chemotherapy-induced Cell Death," Cancer Research, (April 2000) 60:2040-2048.				
	CI	Wang, X. et al., "Inhibition of p38 MAP Kinase Activity Up-Regulates Multiple MAP Kinase Pathways and Potentiates 1,25-Dihydroxyvitamin D <sub>3</sub> -Induced Differentiation of Human Leukemia HL60 Cells," <i>Experimental Cell Research</i> , (2000) 258:425-437.				
	CJ	Wientroub, S. et al. "The Dichotomy in the Effects of 1,25 Dihydroxy Vitamin D <sub>3</sub> and 24, 25 Dihydroxy Vitamin D <sub>3</sub> on Bone Gamma-Carboxyglutamic Acid-Containing Protein in Serum and Bone in Vitamin D-Deficient Rats," <i>Calcif, Tissue Int.</i> , (1987) 40:166-172.				
	CK	Windaus, A. et al., "Uber das Krystallisierte Vitamin D <sub>4</sub> ," Z. Physiol. Chem., (1937) 247:185-188.				
	CL	Yu, W. et al., "Enhancement of 1,25- Dihydroxyvitamin D <sub>3</sub> - Mediated Antitumor Activity with Dexamethasone," J. National Cancer Inst., (January 1998) 90:2:134-141.				
	CM	Zerwekh et al., "Short-Term 1,25-Dihydroxyvitamin D <sub>3</sub> Administration Raises Serum Osteocalcin in Patients with Postmenopausal Osteoporosis," <i>J. Clin. Endocrinol. Metabol</i> , (1985) 60:615-617.				

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# UNITED STATES PATENT AND TRADEMARK OFFICE **ACKNOWLEDGEMENT RECEIPT**

Electronic Version 1.1 Stylesheet Version v1.1.1

> Title of Invention

24 HYDROXYVITAMIN D, ANALOGS AND USES THEREOF

Submission Type:

Information Disclosure Statement

Application Number:

09/753697

\*09/75

EFS ID:

56928

Server Response:

Confirmation Code	Message		
ISVR1	Submission was successfully submitted – Even if Informational or Warning Messages appear below, plenot resubmit this application		
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li	Filename= N/A BusinessRule= Validation System/Fundall Information. #Supporting Msg:Server unable to value the Confirmation/Application numbers at this time. The checked by PTO personnel later.		

First Named Applicant:

**Charles Bishop** 

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## **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

24 HYDROXYVITAMIN D, ANALOGS AND USES THEREOF

Application Number:

09/753697

\*09/753697\*

Confirmation Number:

1609

First Named Applicant:

Charles Bishop

Attorney Docket Number: 0176209316

Art Unit:

1617

Examiner:

Theodore J. Criares

Search string: ...

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4362710 or 4508651 or 4588716 or 4661294 or 4698328 or 4717721 or 4902481 or 5141719 or 5157135 or 5205989 or 5219528 or 5232836 or 5264184 or 5264618 or 5334740 or 5338532 or 5372996 or 5417923 or 5488120 or 5527524 or 5554386 or 5597575 or 5614513 or 5637742 or 5661025 or 5739271 or 5795882 or 6537982 ).pn.

### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	2383446	1941-06-04	Calcott et al			
	2 .	3697559	1972-10-10	DeLuca el al.			
	3	3741996	1973-06-26	DeLuca el al.			
	4	4160803	1979-07-10	Potts			
	5	4362710	1982-12-07	Watanabe			
	6	4508651	1985-04-02	Baggiolini et al	}		
	7	4588716	1986-05-13	DeLuca et al			
	8	4661294	1987-04-28	Holick et al			
	9	4698328	1987-10-06	Neer et al			

1				
	10	4717721	1988-01-25	DeLuca et al
	11	4902481	1990-02-20	Clark et al
	12	5141719	1992-08-25	Fernwood et al
	13	5157135	1992-10-20	Tsuji et al
	14	5205989	1993-04-27	Aysta
	15	5219528	1993-06-15	Clark
	16	5232836	1993-08-03	Bouillon et al
	17	5264184	1993-11-23	Aysta et al
	18	5264618	1993-11-23	Felgner et al
	19	5334740	1994-08-02	Takahashi et al
	20	5338532	1994-08-16	Tomalia et al
	21	5372996	1994-12-13	Labrie
	22	5417923	1995-05-23	Bojanic et al
	23	5488120	1996-01-30	Knutson et al
	24	5527524	1996-06-18	Tomalia et al
	25	5554386	1996-09-10	Groman et al
	26	5597575	1997-01-28	Breitbarth
	27	5614513	1997-03-25	Knutson et al
	28	5637742	1997-06-10	Valles et al
	29	5661025	1997-08-26	Szoka, Jr. et al
	30	5739271	1998-04-14	Sridhar et al
	31	5795882	1998-08-18	Bishop et al
	32	6537982	2003-03-25	Bishop et al

## Remarks

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of

Sheet

Complete if Known				
Application Number 09/753,697				
Filing Date	January 3, 2001			
First Name Inventor	Charles W. Bishop			
Group Art Unit	1617			
Examiner Name	Theodore J. Criares			
Attorney Docket Number	017620-9316			

	U.S. PATENT DOCUMENTS							
Examiner Initials		U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document				
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	FOREIGN PATENT DOCUMENTS					
Examiner Initials	Country Code	Foreign Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Translation	English Abstract
	Belgium	877 356	Wisconsin Alumni Research Foundation	10/15/79	-	
	Japan	5320127	Nisshin Flour Milling Co.	09/29/93		
	Japan	6025039	Kurary Co. Ltd.	02/01/94		
	Japan	62000033	General Hospital	10/15/86		
	EP	0197514	General Hospital	10/15/86		
	EP	0390097	Nisshin Flour Milling Co.	10/03/90		
	PCT	WO 84/04527	Wisconsin Alumni Research Foundation	11/22/84		
	PCT	WO 87/00834	Leo Pharmaceutical Products, Ltd.	02/12/87		
	PCT	WO 90/10620	Wisconsin Alumni Research Foundation	09/20/90		
	PCT	WO 92/21355	Procter & Gamble	12/10/92		
	PCT	WO 93/07883	ISIS Pharmaceuticals	04/29/93		
	PCT	WO 96/40153	Bone Care International	12/19/96		

Examiner Signature	Date Considered	
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